ABSTRACT OF THE INVENTION

Improved fire door assemblies comprise a door frame having structural elements defining an opening, and a door sized to fit into the frame and occlude the opening. Generally, the door can further comprise a top member, a first layer of insulation material positioned along a bottom surface of the door and a support structure connected to the first layer of insulation material. Due to the design of the support structure and the first insulation layer, direct contact between the support structure and the door frame is reduced or eliminated, which can reduce heat transfer pathways between the door frame and the door. In some embodiments, a second insulation layer can be oriented towards the top surface of the door. In these embodiments, the support structure can hold the first insulation layer in a fixed position relative to the second layer of insulation material such that a gap is located between the first layer of insulation material and the second layer of insulation material.

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